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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/509,984 | 09/30/2004 | Hai-Young Lee | 4820-004 | 2930 |

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| EXAMINER |
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JONES, STEPHEN E

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| ART UNIT | PAPER NUMBER |
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2817

DATE MAILED: 06/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/509,984

Applicant(s)

LEE ET AL.

Examiner

Stephen E. Jones

Art Unit

2817

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 5, 8-16 and 19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6, 7, 17 and 18 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☒ Claim(s) 1-19 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>5/18/05</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Species I (Figs. 4a-d and 10a) in the reply filed on 4/7/06 is acknowledged. The traversal is on the ground(s) that the PCT search report did not mention lack of unity. This is not found persuasive because the examiner can make a lack of unity requirement at any time during prosecution (see MPEP 1893.03 (d)).

The requirement is still deemed proper and is therefore made FINAL.

Applicant indicated that Claims 1-4, 6-7, and 16-19 read on the elected embodiment. However, upon examination it appears that Claims 16 and 19 read on non-elected Fig. 10b which includes a step configuration.

2. Claims 5, 8-16, and 19 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 4/7/06.

Drawings

3. Figures 1-2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the

Art Unit: 2817

applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-2, 7, and 17-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Quan (US 5,570,068).

Quan (e.g. Figs. 2-3) teaches a high frequency (GHz) coaxial connector including: an outer connector body (e.g. 60, 70); a inner conductor (62) has a first terminal at the left side of the threaded section and a second terminal is connected to a narrow pin (72) which is extended (i.e. an extendible pin) from the inner conductor; a dielectric (64) insulates the conductor from the body and inherently the dielectric determines the impedance of the connector since the dielectric constant of the material is a fundamental characteristic of impedance of a transmission line structure; a dielectric member (74) has a hole for the pin (72) and is selected to provide impedance matching (i.e. compensation) (e.g. see Col. 3, lines 55-60) (Claim 1, 17); the device is connected to a connection structure (e.g. Fig. 3) thus it can be considered mechanically arrayed (Claim 2); the terminal surface at the left side of the device is not as deep as the second terminal (Claim 7); and it is an SMA connector (e.g. see Col. 3, lines 33-36) (Claim 18).

6. Claims 1-3, 6-7, and 17-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Chamberland et al. (US 4,690,482).

Chamberland (e.g. Fig. 1) teaches a high frequency (GHz) coaxial connector including: an outer connector body containing an inner conductor (e.g. 42) and a dielectric ring (30) insulates the connector body from the inner conductor and inherently the dielectric determines the impedance of the connector since the dielectric constant of the material is a fundamental characteristic of impedance of a transmission line structure; a narrow extendible pin attached to a conductor (32) mates with the inner conductor (42); a dielectric material (44) includes a protrusion mounted to the inner surface of the second terminal end where the extendible pin mates with the inner conductor (42) and the materials are for avoiding impedance mismatches (i.e. the materials compensate for impedance discontinuities) (e.g. see Col. 4, lines 5-10) (Claim 6); the extendible pin is connected through a hole in the protrusion when mated with the inner conductor (Claim 3); the diameter of the inner conductor is practically the same from terminal to terminal (Claim 1, 17); the device is connected to a connection structure thus it can be considered mechanically arrayed (Claim 2); a terminal surface can be arbitrarily designated at the left input and the second terminal is deeper than the left input (Claim 7); and the connector is an SMA (e.g. see the abstract).

Allowable Subject Matter

7. Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion


To expedite prosecution for possible future rejoinder of claims it should be noted that non-elected claim 13 recites the trademark "Teflon". The generic terminology for Teflon should be used in the claim.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen E. Jones whose telephone number is 571-272-1762. The examiner can normally be reached on Monday through Friday from 9 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J. Pascal can be reached on 571-272-1769. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SEJ


STEPHEN E. JONES
PRIMARY EXAMINER